

are—the time and frequency of occurrence, the type of vomiting (effortless “welling up” or retching attended with abdominal contraction), and the amount and character of the vomit, *e. g.*, colour, smell, and presence of froth and special recognisable constituents, such as blood, bile, undigested or partially digested food, worms, fæces, etc : as to the *stools*, the chief points to be noted are—the amount, colour, odour, consistence, and the presence of scybala (hard, roundish lumps of fæces), froth and special constituents such as blood, slime, undigested food, worms, and foreign bodies.

(*To be continued*).

## MALARIA.

BY CAPTAIN GEORGE FOWLER, I.M.S.

(*Continued from page 96.*)

THE second experiment of allowing infected mosquitoes to bite healthy persons is also interesting. Several mosquitoes infected with Benign Tertian Parasites were sent from Italy to London and two persons, who had never been abroad and who were perfectly healthy, allowed themselves to be bitten. These two persons developed malarial fever and malarial parasites were found in their blood. This goes to prove that without the mosquito the disease cannot be spread.

*The use of Fish.*—If collections of water cannot be dealt with by the kerosine oil method, small fish should be placed in the water. These are great enemies of the larvæ and devour them greedily. In the West Indies the small fish known as “Millions” are utilized for the purpose of exterminating larvæ from large collections of water. Frogs do not readily devour larvæ. Recently Dr. Bentley has shown that the wells in Bombay contain Anopheline larvæ.

*Segregation of Infected Persons.*—Patients suffering from Malarial fever should be segregated, and they should be put under mosquito nets, as they will be the means of infecting the mosquitoes in the locality and thus the disease will be spread.

*Quinine as a Prophylactic.*—Quinine is the drug which has a specific effect on the malarial parasite, and may be used as a prophylactic by those so circumstanced that they are unable to protect themselves from the bites of mosquitoes. It may be given in the form of Sulphate or Hydrochloride for adults and as the Tannate for children. The sulphate is cheap and is universally used. In large communities quinine should be given from the 1st of July to the end of October in places where malarial fever is prevalent during these months. In other places, *e. g.*, the Terai, the drug should be given all the year round, as the disease is endemic and exists throughout the year. Heroic

doses are unnecessary—10 grains of the sulphate dissolved in some acidulated water once a week is sufficient. Some prefer 15 grains once a week, while others give 5 grains three times a week. At the Akola Jail with an average daily population of 150 prisoners the 10 grain dose once a week acted most efficiently, as there were no cases of malaria during the months the Quinine was used.

*Quinine in the Treatment of Malarial Fever.*—In treating cases of malarial fever as soon as the parasite is found in the blood, or the clinical symptoms lead one to diagnose the cases as a malarial infection, Quinine must be given at once; 10 grains of the sulphate in solution three times a day for a week, and then 10 grains once a week for two months.

*Methods of Administration.*—By mouth, hypodermically and by enemata. The last method is best for children.

## NOTES ON HOSPITAL BEDSTEADS FOR INDIA.

BY A. NEVE, F.R.C.S.E.

IN Europe and cool climates generally the iron frame, spring mattress type, has come to stay.

In India one finds very diverse patterns in hospitals, whether Government or Mission. It is even possible to find wooden bedsteads and string charpoys: perhaps indicating retrograde tendencies, but also perhaps showing that the metal spring mattress bedstead of various patterns has drawbacks. Cleanliness, freedom from parasite haunts, comfort, durability; these are some of the chief desiderata; economy and coolness are others.

(1) To deal separately with the *Frame*: It seems certain that for durability, and eventual economy, as well as for cleanliness and freedom from parasites an *iron frame* is desirable. The joints should be easily got at for cleaning (a spirit lamp is simple and effectual). Rounded tube sides throughout; not angle iron, where the inner angle is tempting to insects. If there are small vertical tubes at the head they must not be open below, as I have seen even from good manufacturers. In short no bug traps allowed. Castors are more apt to injure a floor than a flat expanded foot, and usually in India manual labour is at hand for lifting. Moreover castors break and come off. A hard, wooden, somewhat convex foot is good if it fits well, but in any case tar will close cracks. Rubber seems unnecessary. Corners can be rounded. It seems useful to have a bow at head and foot; the former at least one foot high, the latter six inches.

(2) *The Mattress*—In cool climates where warm mattresses are necessary, there is every advantage in having a spring mattress underneath; and after nineteen years' experience of the Lawson Tait, I have no hesitation in recommending them. They are easily repaired and spare wires are easily in-

serted: the springs never seem to go wrong. For India, a warm mattress is undesirable, and what is one to use over the wire? Some like to use matting in a ticking cover. Others prefer not to have wire at all: they like something firmer, not liable to rust, easily cleaned, etc. For this reason some apply *nawāh*, i.e., three inch wide cotton tapes woven across the frame. They claim that it is easily applied and removed, and is washable. From personal enquiries at many hospitals I doubt whether in a busy, large hospital these tapes get washed oftener than once in three months.

I recommend a really strong canvas with eyelets, and a quarter-inch rope lashing it to the frame. This can be applied in five minutes and can be washed as often as necessary. The "Whitfield Bedstead Co.," have met my wishes, quoting as follows:—Bedstead 6'-6" × 3'-0", No. 1188, 1½" head and foot bows, ½" filling; height to seat 20," head bow 36" high, foot bow 26, with tubes all round to take canvas lashed to the bedstead. In quantities of 16 so as to pack in a closed case at 17s. 4d. each, freight paid to Bombay = Rs. 13 each. The pattern of washable strong canvas, eyeletted and complete with white cord, is 5s each = Rs. 3-12. Total Rs. 16-12. This would seem to me an excellent and very cheap as well as sanitary bedstead.

Frames of this kind can be seen at Victoria Zenana Hospital, Delhi, and at Karachi. For samples of the canvas or drawings of the bedstead, application should be made to the Whitfield Bedstead Co., Birmingham.

## CAMA AND ALBLESS HOSPITALS, BOMBAY.

BY MISS TINDALL, LADY SUPERINTENDENT.

ON June 27th the first Examination under the thoroughly organized system of 1st, 2nd and 3rd year lectures to all pupils of whatever caste or creed, on Anatomy and Physiology (Elementary), Nursing and Midwifery respectively was held in the lecture room of the Nurses' Home. There were in all fifteen pupils for Anatomy and Physiology, first year, two for Midwifery chiefly with a question or two on the subjects of the previous years, it being the final, third year, followed by a Viva for Midwifery, and one outsider for Midwifery only: in all eighteen. Dr. Rukhmabai, of Surat, most kindly came to Bombay purposely for the examination and spent all day with me.

The papers were all written in the morning, the Vivas after tiffin.

The following are the questions set, each pupil having hers in whatever dialect she preferred; four were in English, ten in Marathi, and two in Guzerathi.

The questions, at my request, were put in a very understandable form, as the Indian women are but little accustomed to writing examination papers, and our desire is not to mystify them, but to find out whether they have a clear understanding of the structure and formation of the body and organs, and their uses. I have no doubt whatever that with the regular system-I